

						Warfighter Pre-Treatment Criteria (Spherical Equivalent)							
Refraction	OD	-2.00	-2.00	X	not used	VIX Wavefront Treatment	ISA	-0.50	< >	-11.00	0.50	< >	3.00
							ASA	-0.50	< >	-11.00	0.50	< >	3.00
	Sphere		Cylinder (enter + or - format)		Axis	Cylinder ≤ 3.00 = Myopia / Hyperopia = 2.00							
	OS	-2.00	-1.00	X	not used	Standard Treatment	ISA	-1.00	< >	-12.00	1.00	< >	4.00
							ASA	-1.00	< >	-8.00	1.00	< >	4.00
						Cylinder ≤ 4.00							
OD	Plus FORMAT Minus	-4.00	+ 2.00	Spherical Equivalent	-3.00	Aviation Pre-Treatment Criteria (Maximum Meridian)							
		-2.00	-2.00			ISA	-1.00	< >	-8.00	1.00	≤	3.00	
OS	Plus FORMAT Minus	-3.00	+ 1.00	Spherical Equivalent	-2.50	ASA	-1.00	< >	-8.00	1.00	≤	3.00	
		Cylinder ≤ 3.00				Minimum Treatment Limit:		-1.00	< >	1.00			

Keratometry		Pre-CRS				Estimated Post-CRS			
OD	45.00	Clinical Criteria Limits	45.00	45.00	OD	41.00	43.00		
	K1			Flat K		Steep K	Flat K		
OS	44.50		46.00	44.50	OS	43.00	42.50		
			> 48.00	< 40.00		> 50.00	< 35.00		

Pachymetry		Pre ASA Criteria $\geq$ 475 microns		Post -ASA	Post -ISA	Assumptions	Estimated tissue ablated per Diopter (microns)	
	OD	580	64	516	356		16	160
		Estimated amount of tissue ablated based on refractive error		Remaining corneal thickness (no flap)	Remaining corneal thickness (after flap creation)			
	OS	580	48	532	372			Estimated thickness of ISA Flap (microns)
		Pre ISA Criteria $\geq$ 500 microns		Clinical Criteria $\geq$ 375	Clinical Criteria $\geq$ 300			

Warfighter Requirements				Aviation Requirements						
OD	OS	OD	OS	ODOS						
Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	CYLINDER POWER (Astigmatism)				Meets Criteria	Meets Criteria	
Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	ISA	Spherical Equivalent	REFRACTIVE ERROR LIMITS	Maximum Meridian	ISA	Meets Criteria	Meets Criteria
Meets Criteria	Meets Criteria	Meets Criteria	Meets Criteria	ASA			ASA	Meets Criteria	Meets Criteria	
Standard Treatment		Wavefront Treatment								
Meets Criteria	meets Criteria	Pre-ISA				Pre-ISA	Meets Criteria	meets Criteria		
Meets Criteria	Meets Criteria	Post-ISA / ASA				Post-ISA / ASA	Meets Criteria	Meets Criteria		
Meets Criteria	Meets Criteria	Pre-TX				Pre-TX	Meets Criteria	Meets Criteria		
		ISA				ISA				
Meets Criteria	Meets Criteria	Post-TX				Post-TX	Meets Criteria	Meets Criteria		
				CORNEAL THICKNESS						
Meets Criteria	Meets Criteria	Pre-TX				Pre-TX	Meets Criteria	Meets Criteria		
		ASA				ASA				
Meets Criteria	Meets Criteria	Post-TX				Post-TX	Meets Criteria	Meets Criteria		

Additional guidance is available on-line:	AF Knowledge Exchange (DotMil) - USAF Refractive Surgery	<a href="https://kx.afms.mil/USAF-RS">https://kx.afms.mil/USAF-RS</a>
	Public Domain - USAF Refractive Surgery Website:	<a href="http://airforcemedicine.afms.mil/USAF-RS">http://airforcemedicine.afms.mil/USAF-RS</a>
	AF Knowledge Exchange (DotMil) - USAF Waiver Guide Website:	<a href="https://kx.afms.mil/waiverguide">https://kx.afms.mil/waiverguide</a>
	AF Knowledge Exchange (DotMil) - USAF Optomeets Criteriary Website:	<a href="https://kx.afms.mil/optoMeets_Criteriary">https://kx.afms.mil/optoMeets_Criteriary</a>

This tool was revised on 23 Nov 2010

# USAF Refractive Surgery (USAF- RS)

## Clinical Guidelines

### REFRACTIVE STABILIZATION:

No more than 0.5D shift in sphere/cylinder or more than 15 degree axis change over the past year

### PUPILS:

Up to and including 9.0 mm

### OCCUPATIONAL CONSIDERATIONS:

All other AASD may be treated at any DOD RS Center , except as below:

*Hyperopic AASD evaluated at ACS prior to treatment at JWRSC, Lackland AFB*

Special Forces: PRK recommended

Security Police: PRK recommended

### MEDICATIONS THAT ARE DISQUALIFYING FOR REFRACTIVE SURGERY

Imitrex: discontinued use for at least 6 months

Accutane: discontinued use for at least 6 months

TB Meds (INH): discontinued use for at least 1 month

Amiodarone (antiarrhythmic med)

Prednisone

Any immunosuppressive drug

### OCULAR CONDITIONS THAT ARE DISQUALIFYING FOR REFRACTIVE SURGERY

History of Herpetic Eye Disease

Keratoconus or Form-fruste keratoconus

Pellucid Marginal Degeneration

Ocular Rosacea

Severe Dry Eye Disease

Visual Axis Corneal Scars

Glaucoma

*NOTE: Pigment Dispersion Syndrome (PDS) is NOT disqualifying, if member is not on glaucoma medication and does not exhibit any sign of glaucoma*

### SYSTEMIC CONDITIONS THAT ARE DISQUALIFYING FOR REFRACTIVE SURGERY

Immunodeficiency Diseases (AIDS/HIV on meds)

Pregnancy - must be 6 months post-partum

Diabetes

Breastfeeding - nursing discontinued for 6 months

Keloid formers are OK

### AUTOIMMUNE DISEASES (listed below by main target organ - not comprehensive)

#### **Endocrine Glands**

Type 1 or immune-mediated diabetes mellitus

Grave's Disease

Hashimoto's thyroiditis

Autoimmune oophoritis and orchitis

Autoimmune disease of the adrenal gland

#### **Gastrointestinal System**

Crohn's Disease

Ulcerative colitis

Autoimmune hepatitis

#### **Skin**

Psoriasis

Dermatitis Herpetiformis

Pemphigus Vulgaris

Vitiligo

#### **Blood**

Autoimmune hemolytic anemia

Pernicious anemia

Autoimmune thrombocytopenia

#### **Blood Vessels**

Temporal arteritis

Anti-phospholipid syndrome

Vasculitides such as Wegener's granulomatosis

Behcet's disease

#### **Nervous System**

Multiple sclerosis

Myasthenia gravis

Autoimmune uveitis

Autoimmune neuropathies

*such as Guillain-Barré Primary biliary cirrhosis*

Information updated on 23 NOV 2010

# USAF Refractive Surgery (USAF- RS)

## Clinical Guidelines



## TPSK: I-S Value Calculator

Applicant:

Date: 11/24/2010

Enter Keratometry powers superior and inferior symmetrically about the center.

*If using less than 5 entries, leave unused cells blank. "00.00" entries will affect calculated averages.*

	OD	
40.00	41.00	41.00
Superior Avg =	40.67	# of entries 3
I-S Difference =	0.93	within limits
Inferior Avg =	41.60	# of entries 3
41.40	41.40	42.00

	OS	
41.00	41.00	41.00
41.00	41.00	41.00
Superior Avg =	41.00	# of entries 5
I-S Difference =	1.00	exceeds limits
Inferior Avg =	42.00	# of entries 5
42.00	42.00	42.00

OD to OS Comparison (Average Differences)		
Just Superior Areas =	0.33	within limits
OD to OS Overall =	0.37	within limits
Just Inferior Areas =	0.40	within limits
Difference > 1.00 exceeds USAF_RS Criteria		

*Note: This tool was designed for use with Humphrey Corneal Topographers (numerical display).  
Results should be used only as adjunct to other diagnostic clinical information by an qualified provider.*

revision date: 18 NOV 09